Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the Application:

Listing of Claims:

1. (previously presented) An apparatus capable of providing an output signal in response to sound pressure in the vicinity of a desired acoustic source, the apparatus comprising:

a main body;

a boom, movably coupled to the main body and adapted to be positioned in at least a first position or a second position;

a microphone having a diaphragm;

an acoustic sensing point, acoustically coupled to the microphone, wherein the acoustic sensing point is disposed at different distances from the desired acoustic source when the boom is in the first position and the second position; and,

a controller, coupled to the boom, for changing a ratio of an amplitude of the output signal to an amplitude of sound pressure at the acoustic sensing point in response to the position of the boom.

2. (original) The apparatus of claim 1, wherein the controller is adapted to maintain a ratio of the amplitude of the output signal to an amplitude of sound pressure in the vicinity of the desired acoustic source substantially independent of the position of the boom.

3. (original) The apparatus of claim 1, wherein the controller is adapted to change an amplification gain in response to the position of the boom, wherein the amplification gain is a ratio of the amplitude of the output signal to an amplitude of an electrical signal converted by the microphone from sound pressure at the diaphragm.

4. (previously presented) The apparatus of claim 1, wherein the controller is adapted to change a sensitivity of the microphone in response to the position of the boom, wherein the microphone sensitivity is a ratio of an amplitude of an electrical signal converted by the micro-

phone from sound pressure at the diaphragm to an amplitude of the sound pressure at the diaphragm.

5. (original) The apparatus of claim 4, wherein:
the microphone is of a capacitive type; and,
the controller is adapted to change a bias voltage of the microphone.

6. (withdrawn) The apparatus of claim 4, wherein:
the microphone is a directional, capacitive microphone; and,
the controller is adapted to change a volume of at least one sealed acoustic cavity acoustically coupled to the diaphragm.

7. (original) The apparatus of claim 1, wherein the controller is adapted to change a ratio of an amplitude of sound pressure at the diaphragm to the amplitude of the sound pressure at the acoustic sensing point in response to the position of the boom.

8. (withdrawn) The apparatus of claim 7, wherein the controller is adapted to change an amount of acoustic absorption in an acoustic channel coupling the acoustic sensing point to the microphone diaphragm.

9. (withdrawn) The apparatus of claim 7, wherein the controller is adapted to change an amount of impedance mismatch in an acoustic channel coupling the acoustic sensing point to the microphone diaphragm.

10. (original) The apparatus of claim 1, wherein the apparatus is a communications headset.

11. (original) The apparatus of claim 1, wherein the apparatus is a mobile phone.

12. (original) The apparatus of claim 1, wherein the apparatus is a sound recorder.

13. (original) The apparatus of claim 1, wherein the apparatus is a video camera.

14. (previously presented) An apparatus capable of providing an output signal in response to sound pressure in the vicinity of a desired acoustic source, the apparatus comprising:

a main body;

a boom, movably coupled to the main body and adapted to be positioned in at least a first position or a second position;

a microphone having a diaphragm for generating output signals in response to sound pressure from the desired acoustic source;

an acoustic sensing point, acoustically coupled to the microphone, wherein the acoustic sensing point is disposed at different distances from the desired acoustic source when the boom is in the first position and the second position; and,

sensitivity control means, coupled to the boom, for changing a ratio of an amplitude of the output signal to an amplitude of sound pressure at the acoustic sensing point in response to the position of the boom.

15. (original) The apparatus of claim 14, wherein the sensitivity control means is adapted to maintain a ratio of the amplitude of the output signal to an amplitude of sound pressure in the vicinity of the desired acoustic source substantially independent of the position of the boom.

16. (previously presented) The apparatus of claim 14, wherein the sensitivity control means is adapted to change a sensitivity of the microphone in response to the position of the boom, wherein the microphone sensitivity is a ratio of an amplitude of an electrical signal converted by the microphone from sound pressure at the diaphragm to an amplitude of the sound pressure.

17. (withdrawn) The apparatus of claim 16, wherein:

the microphone is a directional, capacitive microphone; and,

the sensitivity control means is adapted to change a volume of at least one sealed acoustic cavity acoustically coupled to the diaphragm.

18. (original) The apparatus of claim 14, wherein the sensitivity control means is adapted to change a ratio of an amplitude of sound pressure at the diaphragm to the amplitude of the sound pressure at the acoustic sensing point in response to the position of the boom.

19. (withdrawn) The apparatus of claim 18, wherein the sensitivity control means is adapted to change an amount of acoustic absorption in an acoustic channel coupling the acoustic sensing point to the microphone diaphragm.

20. (withdrawn) The apparatus of claim 18, wherein the sensitivity control means is adapted to change an amount of impedance mismatch in an acoustic channel coupling the acoustic sensing point to the microphone diaphragm.

21. (original) An apparatus capable of providing output signals in response to acoustic signals received from a desired acoustic source, the apparatus comprising:

a main body;

a boom, movably coupled to the main body and adapted to be positioned in at least a first position or a second position relative to the main body, and further having at least a first opening for receiving acoustic signals when the boom is in at least one of the first position and the second position;

a microphone having a diaphragm; and,

a controller circuit, coupled to the boom, adapted to change a ratio of an amplitude of the output signal to an amplitude of the acoustic signal at the diaphragm in response to the position of the boom.

22. (original) The apparatus of claim 21, further comprising:

a switch, coupled to the main body and selectively engaged by the boom, that activates the controller circuit to change the ratio of the amplitude of the output signal to the amplitude of the acoustic signal at the diaphragm in response to the boom being in at least one of the first or second position.

23. (original) The apparatus of claim 21, wherein

the boom is slidably coupled to the main body so as to be extended from the main body and closer to the desired acoustic source in the first position, and retracted towards the main body in the second position; and,

the microphone receives acoustic signals through the first opening located at a distal end of the boom when the boom is in each of the first and second positions.

24. (original) The apparatus of claim 23, wherein:

the main body includes a boom jacket; and,

the boom is slidably coupled to the boom jacket.

25. (original) The apparatus of claim 23, wherein:

the controller circuit changes an amplification gain applied to electrical signals converted by the microphone from acoustic signals received, wherein a first amplification gain is applied when the boom is in the first position and a second amplification gain is applied when the boom is in the second position, the first amplification gain being smaller than the second amplification gain.

26. (previously presented) The apparatus of claim 23, wherein:

the controller circuit changes a sensitivity of the microphone to acoustic signals received, wherein the microphone has a first sensitivity when the boom is in the first position and a second sensitivity when the boom is in the second position, the first sensitivity being lower than the second sensitivity.

27. (original) The apparatus of claim 21, wherein:

the boom pivots about the main body; and,

the microphone receives acoustic signals through the first opening when the boom is in the first position and through a second opening when the boom is in the second position, the first opening being located at a first distance from the desired acoustic source when the boom is in the first position and the second opening being located at a second distance from the desired acoustic source when the boom is in the second position, wherein the first distance is shorter than the second distance.

28. (original) The apparatus of claim 27, wherein:

the controller circuit changes an amplification gain applied to electrical signals converted by the microphone from acoustic signals received, wherein a first amplification gain is applied when the boom is in the first position and a second amplification gain is applied when the boom is in the second position, the first amplification gain being smaller than the second amplification gain.

29. (previously presented) The apparatus of claim 27, wherein:

the controller circuit changes a sensitivity of the microphone to acoustic signals received, wherein the microphone has a first sensitivity when the boom is in the first position and a second sensitivity when the boom is in the second position, the first sensitivity being lower than the second sensitivity.

30. (original) The apparatus of claim 21, wherein:

the boom comprises at least a first segment and a second segment movably coupled to the first segment, so as to provide the first position wherein the first segment is extended from the main body and the second segment is extended from the first segment, both being extended closer to the desired acoustic source, and to provide the second position wherein the first segment and the second segment are both retracted towards the main body; and,

the microphone receives acoustic signals through the first opening located at a distal end of the second segment of the boom when the boom is in each of the first and second positions.

31. (original) The apparatus of claim 30, wherein the first segment of the boom is slidably coupled to the main body.

32. (original) The apparatus of claim 30, wherein the first segment of the boom pivots about the main body.

33. (original) The apparatus of claim 30, wherein the second segment of the boom is slidably coupled to the first segment.

34. (original) The apparatus of claim 30, wherein the second segment of the boom pivots about the first segment.

35. (original) The apparatus of claim 30, wherein:

the controller circuit changes an amplification gain applied to electrical signals converted by the microphone from acoustic signals received, wherein a first amplification gain is applied when the boom is in the first position and a second amplification gain is applied when the boom is in the second position, the first amplification gain being smaller than the second amplification gain.

36. (previously presented) The apparatus of claim 30, wherein:

the controller circuit changes a sensitivity of the microphone to acoustic signals received, wherein the microphone has a first sensitivity when the boom is in the first position and a second sensitivity to acoustic signals received when the boom is in the second position, the first sensitivity being lower than the second sensitivity.

37. (original) The apparatus of claim 21, further comprising:

a frequency response adjustment circuit, electrically coupled to the microphone, adapted to compensate for shifts in frequency spectrum in the acoustic signals received from the desired acoustic source, the frequency spectrum being a function of a distance between an acoustic sensing point and the desired acoustic source.

38. (original) The apparatus of claim 21, wherein the microphone is a noise-canceling microphone and is disposed near the distal end of the boom, the apparatus further comprising:

a frequency response compensation circuit, electrically coupled to the microphone, adapted to compensate for shifts in frequency response to the acoustic signals received from the desired acoustic source, the frequency response being a function of a distance between the noise-canceling microphone and desired acoustic source.

39. (original) An apparatus capable of providing output signals in response to acoustic signals from a desired acoustic source and receiving audio signals, the apparatus comprising:

a main body, enclosing a microphone for generating output signals in response to receiving acoustic signals;

a boom, movably coupled to the main body and adapted to be positioned in at least a first position or a second position relative to the main body, and further having an acoustic sensing point;

a receiver, adapted to generate an acoustic output signal in response to receiving an electrical input signal; and,

a receive controller circuit, coupled to the boom, adapted to change a ratio of an amplitude of the acoustic output signal at the receiver to an amplitude of the electrical input signal at the receiver in response to the position of the boom.

40. (original) The apparatus of claim 39, wherein:

the acoustic sensing point is closer to the desired acoustic source when the boom is in the first position than when the boom is in the second position; and,

the receive controller circuit changes a receive gain applied to electrical signals received at the receiver, wherein a first receive gain is applied when the boom is in the first position and a second receive gain is applied when the boom is in the second position, the first receive gain being greater than the second receive gain.

41.–57. (cancelled)

58. (previously presented) An apparatus capable of providing output signals in response to acoustic signals, including acoustic signals received from a desired acoustic source, the apparatus comprising:

a main body;

a microphone housed in the main body;

a primary boom, coupled to the main body; and,

a secondary boom slidably coupled to the primary boom and having an opening at a distal end thereof, the opening being acoustically coupled to the microphone,

wherein a ratio of an amplitude of the output signal to an amplitude of acoustic signals received at the opening of the secondary boom is a function of the position of the secondary boom.

59. (original) The apparatus of claim 58, wherein:

the primary boom is movably coupled to the main body; and,

the ratio of the amplitude of the output signal to the amplitude of the received acoustic signal is a function of the positions of both the primary boom and the secondary boom.

60. (original) The apparatus of claim 58, further comprising:

an extendable acoustic channel, acoustically coupling the microphone to the opening at the distal end of the secondary boom, the acoustic channel extending from a point of coupling of the boom with the main body to the distal end of the secondary boom, the extendable acoustic channel being substantially axially in line through the primary boom and the secondary boom, wherein the acoustic channel is associated with a transmission loss that is a function of the length of the acoustic channel.

61. (withdrawn) The apparatus of claim 58, wherein the extendable acoustic channel comprises:

a first acoustic channel in the primary boom encased in a first material; and,

a second acoustic channel in the secondary boom encased in a second material, the first acoustic channel being of variable length in response to a sliding position of the secondary boom relative to the primary boom.

62. (previously presented) The apparatus of claim 58, wherein the secondary boom comprises a steel tube.

63. (original) The apparatus of claim 4, wherein:

the microphone is of a capacitive type; and,

the controller is adapted to change a bias resistance of the microphone.